



Rogers Corporation continuously innovates and expands offerings of PORON® microcellular polyurethane foams to meet customers' dynamic design needs. The newest addition to the Rogers line of high performance foam products, the AquaPro™ 37 very soft material provides enhanced water sealing solutions. The versatile range of materials ensures that design engineers never have to settle when a high performing water seal is required.

PORON® AQUAPRO™ FAMILY: FORMULATION 37

PORON AQUAPRO FAMILY

The AquaPro family provides enhanced protection from water ingress due to its water sealing capability and long term performance. The new AquaPro 37 formulation requires the lowest compression force of any PORON water sealing formulation in achieving a tight seal.

- Durable, long-term performance needed to maintain a seal
 - Resistance to stress relaxation and compression set
- Broad temperature range
 - Performs reliably between -40°C and 90°C for constant use and up to 120°C for intermittent use
- Low Outgassing
 - No plasticizers to migrate, noncorrosive to metal and environmentally safe
- Reliable water sealing for thin applications
 - Gasket widths as narrow as 0.5 mm

NOTE: Please refer to the Formulation 37 Data Sheets for UL certifications.

DURABLE PERFORMANCE. DIVERSE APPLICATIONS.

PORON AquaPro material provides better sealing for a wide variety of applications, even in less-than-ideal conditions.



MOBILE
DEVICES



ROOF MOUNTED
ANTENNA



HEADLIGHTS/
TAIL LIGHTS



ELECTRICAL
ENCLOSURES

INTRODUCING A NEW HYDROPHOBIC TECHNOLOGY

With AquaPro 37 polyurethane you don't have to choose between good water sealing and long-term performance. AquaPro 37 material is a softer, better sealing material for long-lasting protection of sensitive electronics and enclosed devices.

LEARN MORE

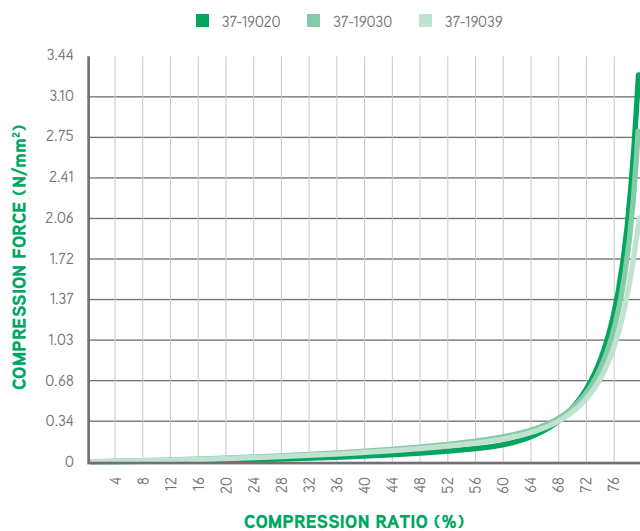
Contact your local Rogers sales rep for more information and receive a free sample of AquaPro 37 foam.

Two important factors determine the optimal grade and thickness for a water sealing application: *Compressibility and Sealing Effectiveness.*

1 COMPRESSIBILITY

Compression Force Deflection (CFD) curves represent the amount of force needed to compress the foam a percentage of the total thickness. During installation, it is important to take CFD into consideration, as the substrate can deflect or damage if the foam is too firm or compressed too much.

The PORON AquaPro products range in compression force deflection values making the material selection process easier.

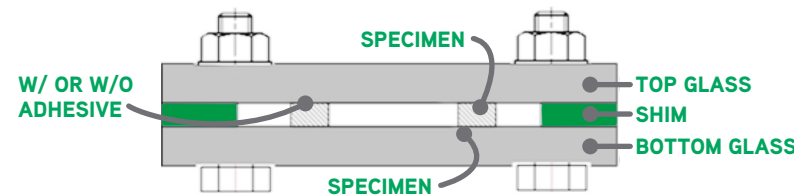


2 SEALING EFFECTIVENESS

A WATER IMPERMEABILITY

Rogers performs a test that is similar to IPX7, a stringent enclosure requirement in the IP rating system required for the most demanding applications:

- 1mm width circular gasket, with adhesive on both sides and between 2 acrylic plates, is immersed in one meter of water for 30 minutes without any compression.
- This internal method only evaluates the gasket alone with adhesive.



B INGRESS PROTECTION

IEC 60529 Classification of Degrees of Protection Provided by Enclosures provides a system for specifying the enclosures of electrical equipment on the basis of protection from water and particulates provided by the enclosure. The IEC publication defines Ingress Protection with the following nomenclature:

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TEST CONDITION 1

1mm width circular gasket with adhesive on both sides is immersed in one meter of water for 30 minutes without any compression.

IPX7 Water Seal (adhesive on both sides)

MATERIALS	0% COMPRESSION
37-19020	PASS
37-19030	PASS
37-19039	PASS
S (0.3MM)	PASS
S (0.5MM)	PASS
S (1.0MM)	PASS

TEST CONDITION 2

1mm width circular gasket with adhesive on one side is compressed to varying levels and immersed in one meter of water for 30 minutes

Performs the test with gasket material before and after compression set treatment (simulating aging).

Compression set treatment condition: Material is compressed by 50% and then placed in 70°C oven for 22 hours

MATERIALS	50% COMPRESSION
37-19020	PASS
37-19030	PASS
37-19039	PASS
S (0.3MM)	FAILED
S (0.5MM)	FAILED
S (1.0MM)	FAILED

IPX7 Water Seal (adhesive on one side, post C-set treatment)*

MATERIALS	25% COMPRESSION	25% COMPRESSION
37-19020	50	PASS
37-19030	50	PASS*
37-19039	50	N/A*

TEST CONDITION 3

0.5mm width circular gasket with adhesive on one side is compressed 25% and immersed in 1/2 meter of water for 30-minutes.

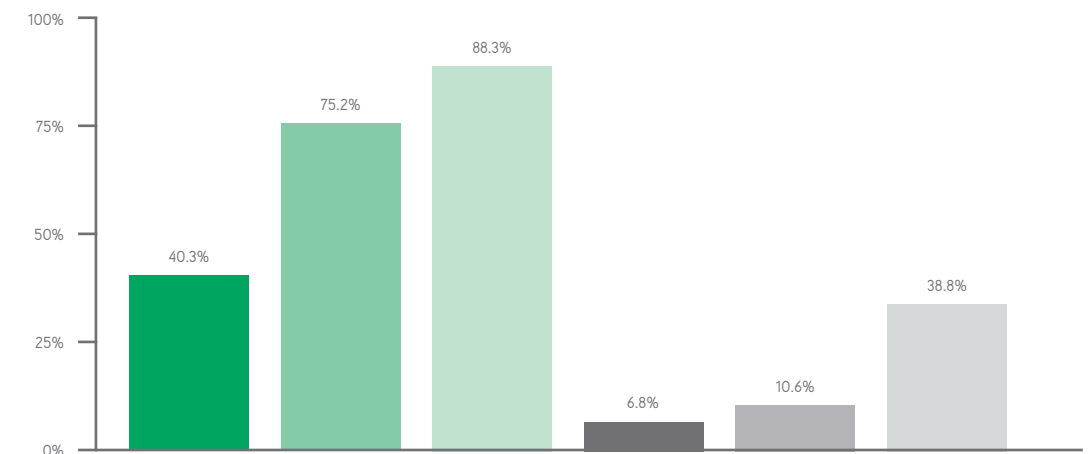
Performs the test with gasket material before and after compression set treatment (simulating aging).

* Gasket height-to-width ratio >1 is not recommended due to assembly challenge.

The PORON AquaPro family is critical to achieving the desired IP rating.

C IMPACT PROTECTION

- 37-19020
- 37-19030
- 37-19039
- S (0.3MM)
- S (0.5MM)
- S (1.0MM)



ABOUT ROGERS CORPORATION

Rogers Corporation (NYSE:ROG) is a global leader in engineered materials to power, protect, and connect our world. With more than 180 years of materials science experience, Rogers delivers high-performance solutions that enable clean energy, internet connectivity, and safety and protection applications, as well as other technologies where reliability is critical. Rogers delivers Power Electronics Solutions for energy-efficient motor drives, vehicle electrification and alternative energy; Elastomeric Material Solutions for sealing, vibration management and impact protection in mobile devices, transportation interiors, industrial equipment and performance apparel; and Advanced Connectivity Solutions for wireless infrastructure, automotive safety and radar systems. Headquartered in Connecticut (USA), Rogers operates manufacturing facilities in the United States, China, Germany, Belgium, Hungary, and South Korea, with joint ventures and sales offices worldwide.

FOR MORE INFORMATION, VISIT WWW.ROGERSCORP.COM.

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